

Docket No. GAM-001CON

11/24/04

AF/3723/15

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Barry Gammon
Serial No.: 10/783,812
Filed: February 20, 2004
For: SOCKET WITH OFF-CENTER SLOT
Examiner: Hadi Shakeri
Art Unit: 3723

Paper No. 7

APPELLANT'S APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The Applicant in the above-referenced application hereby appeals the examiner's decision regarding the subject matter of the application.

Introduction

The present invention relates to sockets for use in loosening and tightening nuts and washers in difficult to reach locations. Specifically, the present invention relates to devices for loosening and tightening nuts and washers used to connect pipes and tubing to basin faucet connections.

Real Party In Interest

Barry Gammon is the only party in interest.

Related Appeals and Interferences

There are no related appeals known to the appellant or his legal representative which will directly affect or be directly affected by or have any bearing on the Board's decision in this appeal.

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Status of Claims

Claims 1-14 were presented with this continuation application as filed and Claims 7-14 were canceled by preliminary amendment filed February 20, 2004. An amendment submitted concurrently with this brief made no amendments to the remaining claims. This amendment narrows the issues for appeal and entry of the amendment is expected. Thus, Claims 1-6 are presented as amended and being pending and at issue in this appeal. Claim 1 is the sole independent claim. The pending claims on appeal are set out in an appendix to this Appeal Brief (Exhibit A).

Status of Amendments

The appellant submitted the preliminary amendment to address the examiner's remarks made in the parent application of the present application. The parent application was filed February 25, 2003, application serial number 10/374,239, now US Patent No. 6,701,807 issued March 9, 2004. The preliminary amendment was entered and considered by the Examiner in the Office Action dated July 23, 2004. The six pending claims of the application were rejected in the Office Action. The appellant filed a Notice of Appeal on September 24, 2004.

Summary of the Invention

The invention of the pending claims on appeal is directed to a socket. The socket is a socket body having a slot running its length and, in one face, a driver port for receiving a socket driver. The driver port is offset from the centerline of the socket body. The opposing face of the socket body and that portion of the slot adjacent to that face are configured to grab a connector nut to be loosened or tightened. Having a slot through the length of the socket allows a user to comfortably fit the socket around any tubing or piping that terminates in or passes through the nut to be loosened or tightened. Having the driver port off center of the body but still part of the socket body allows the user to comfortably manipulate the socket at a distance and with leverage. The opposing face of the socket may also include face slots spaced to accommodate the wings of a plastic nut should one have to be loosened or tightened.

A single socket body of the present invention may be configured to accept connector nuts of varied sizes. That capability may be achieved by forming a portion of the slotted space of the socket body with a plurality of stepped regions varying in dimensions that conform to the dimensions of connector nut sizes in use. Alternatively, the socket body may be configured with only one nut-retaining space configuration. A plurality of socket bodies each with a different slot space configuration may be assembled in a kit to allow a user to employ separate sockets for differing nut dimensions.

The nut-receiving space is established by forming in the socket body an annulus, the center of which is off the centerline of the socket body. The socket body may be cylindrical or polygonal. A portion of the circumference of the wall of the annulus is removed through the entire length and through the thinner portion of the annulus wall to form a slot therein. The width of the slot is selectable but of a size sufficient to allow a pipe or tube to pass there through. A nut capturing region is established adjacent to a first face of the socket body. The nut capturing region is formed in the thicker portion of the annulus wall adjacent to that first face. The opposing face of the socket body includes a driver port for receiving a socket driver. The driver port is located in the thicker portion of the annulus wall. (Page 3, paragraphs 7-9 of the application.)

Appellant respectfully submits that the pending claims are fully supported by the original disclosure.

The Issues

1. The Examiner has rejected Claims 1-2 under 35 USC § 102(b) as being anticipated by Johnson (US Patent No. 2,715,347). The Examiner asserts that the socket of Johnson anticipates the socket of the present invention. For this reason, the first issue may be stated as follows:

Is the appellant's socket as described in Claims 1-2 anticipated by the socket described by Johnson?

The appellant respectfully submits that the socket of Claims 1-2 is clearly and patentable distinct from the Johnson socket for the reasons stated herein.

2. The Examiner has rejected Claims 3-6 under 35 USC § 103(a) as being unpatentable over Johnson in view of Farnan et al. (US Patent No. Des. 376,521). The Examiner asserts that the socket of Johnson, when combined with the stepped polygonal features of the Farnan socket, renders the socket of Claims 3-6 unpatentable. In addition, the Examiner has rejected Claims 4-5 under 35 USC § 103(a) as being unpatentable over Johnson in view of Makovsky et al. (US Patent No. 5,697,268). The Examiner asserts that the socket of Johnson, when combined with the wing nut slots of the Makovsky socket, renders the socket of Claims 4-5 unpatentable. As the two rejections under 35 USC § 103(a) are based substantially on Johnson, the second issue may be stated as follows:

Is the appellant's socket as described in Claims 3-6 nonobvious over Johnson in view of Farnan, or as described in claims 4-5 over Johnson in view of Markovsky?

The appellant respectfully submits that the socket of Claims 3-6 is clearly and patentable distinct from the combination of Johnson and Farnan or the combination of Johnson and Markovsky for the reasons stated herein.

Grouping of Claims

Claims 1-2 may be considered together with regard to the anticipation arguments.

Claims 3-6 may be considered together with regard to the nonobviousness arguments.

Arguments

1. Anticipation

In the July 23, 2004, Office Action Claims 1-2 were rejected under 35 U.S.C. § 102(b) as being anticipated by Johnson. It is stated in the office action that "Johnson discloses all the limitations, i.e., a socket having a center line (B), first face (bottom face as shown in Figs. 2 and 4), an opposite second face, and a receiving slot extending from the first face towards the second including a receiving region (8) having a center line (A) offset from (B), adjacent to the first face

(first face separated from the second face by web (10), and wherein the second face includes a port (13).” (Page 2, paragraph 3, of the Office Action.)

The present invention as described in pending Claim 1 is a socket including a socket body having a centerline and a perimeter, a first face, an opposing second face and a receiving slot extending from the first face to the second face, wherein the receiving slot includes a receiving region adjacent to the first face for receiving and capturing therein the connection element, the receiving region having a centerline that is not in alignment with the centerline of the socket body and includes a step against which the connection element rests during rotation of the socket body, wherein the second face includes a socket driver port therein that does not extend through to the first face of the socket body, the socket driver port having a centerline that is not in alignment with the centerline of the socket body, and wherein the socket driver port is positioned within the perimeter of the socket body. Among other things, Johnson fails to provide a step in the receiving region, thereby increasing the likelihood that a wrench will not be able to secure a nut in place as it is being rotated.

Johnson also fails to provide a socket driver port that is part of the socket body. Instead, the driver port of the Johnson wrench is in the handling-receiving shank of the wrench rather than in the head proper of that wrench. See column 1, line 60, to column 2, line 3, of Johnson in which the head proper or box portion 5 of a bifurcated wrench head is described, and column 2, lines 27-37, in which the handle-receiving shank 12 is separately identified as an extension of the socket head. In addition, the square transverse opening 13 of that shank 12 extends completely through the shank for receiving a handle. That arrangement forces the receiving region of the wrench head and the driver port to be parallel to one another rather than offset. The Johnson design leads to a reduction in mechanical advantage because of the positioning of the handle opening with respect to the open end of the box. Further, the design shown in Johnson requires considerable space to rotate the handle that extends outwardly from the wrench head. (See the declaration of Roland L’Heureux attached hereto as Exhibit B.)

The limitations associated with the positioning of the driver port on the Johnson wrench are absent in the design of the socket of the present invention. Specifically, the receiving region and the driver port are within the dimensions of the socket body of the present invention, not adjacent to one another. This is evident in the formation of the driver port as not extending through to the first face of the socket body, as shown in the drawings. Doing so would cause

degradation of the socket body structure, which is configured to maximize mechanical advantage and to minimize the footprint for use in confined spaces. Additionally, placing the driver offset from the receiving region in the present invention provides a method for avoiding obstructions to rotation. By making the driver port extend through and through, Johnson fails to provide a connector rotation device that satisfies all three conditions.

The socket of the present invention as described in Claim 1 has a receiving region with a centerline that is offline from the centerline of the socket body, a driver port with a centerline that is offline from the centerline of the socket body, and a driver port that does not extend through and through. Those features render the socket suitable for use in confined spaces and where obstructions exist. Johnson fails to provide such a device.

The Examiner has rejected Claims 1-2 under 35 USC § 102(b) based on an assertion that the patent to Johnson anticipates the present invention. In view of the foregoing arguments, appellant respectfully requests the Board to reverse this rejection.

2. Nonobviousness

In the Office Action, dependent Claims 3-6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Johnson in view of Farnan. For the reasons set forth above regarding the Johnson reference, Appellant suggests that the Farnan reference does not apply to the present invention. Appellant also respectfully notes that Farnan fails to show a basin wrench with a driver port as part of the socket body. Instead, the Farnan design shows the driver port as an attachment to the socket body. Moreover, the driver port is through and through. Appellant also notes that nowhere in either reference is it taught or fairly suggested to make such a modification to either of the other wrenches described in those references.

In the office action, Claims 4-5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Johnson in view of Makovsky. For the reasons set forth above regarding the Johnson reference, Appellant also respectfully notes that Makovsky fails to show a basin wrench with a receiving region and a river port that are offline form the centerline of the socket body. In Makovsky, the receiving region and driver port are aligned with one another. That arrangement is unsuitable for a socket to be employed to loosen or tighten nuts having obstructions such as tubes or pipes. Indeed, Makovsky teaches away from such an arrangement. Appellant notes that

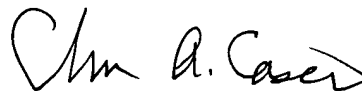
nowhere in either Johnson or Makovsky is it taught or fairly suggested to make such a modification to either of the other wrenches described in those references.

The Examiner has rejected Claims 3-6 under 35 USC § 103(a) based on an assertion that the patent to Johnson combined with the patent to Farnan render the present invention obvious. Additionally, the Examiner has rejected Claims 4-5 under 35 USC § 103(a) based on an assertion that the patent to Johnson combined with the patent to Makovsky render the present invention obvious. In view of the foregoing arguments, Appellant respectfully requests the Board to reverse these rejections.

Summary

In summary, the Appellant submits that his invention is novel and nonobvious over the prior art cited by the Examiner. The prior art does not fairly teach or suggest a socket with slot off center of the body of the socket centerline and a driver port also off center of the socket centerline. For the reasons stated herein, it is submitted that the Examiner's rejections of the pending claims are in error and should be reversed by the Board.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Chris A. Caseiro". The signature is fluid and cursive, with the first name "Chris" being more prominent.

Chris A. Caseiro, Reg. No. 34,304
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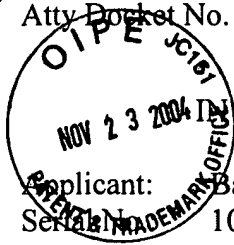


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I hereby certify that this correspondence is being transmitted to Mail Stop Appeal Brief - Patents, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450, on November 23, 2004, in an envelope deposited with the United States Postal Service using the Express Mail service pursuant to 37 C.F.R. § 1.10(a), Express Mail label no. ED 279262505 US.

A handwritten signature in cursive script, appearing to read "Chris A. Caseiro".

Chris A. Caseiro



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Barry Gammon
Serial No. 10/783,812
Filed: February 20, 2004
For: SOCKET WITH OFF-CENTER SLOT
Examiner: Hadi Shakeri
Art Unit: 3723

Attachment to Paper No. 7

EXHIBIT A TO APPELLANT'S APPEAL BRIEF

PENDING CLAIMS SUBJECT OF THE APPEAL:

1. A socket for rotatably loosening or tightening a connection element, the socket comprising a socket body having a centerline and a perimeter, a first face, an opposing second face and a receiving slot extending from the first face to the second face, wherein the receiving slot includes a receiving region adjacent to the first face for receiving and capturing therein the connection element, the receiving region having a centerline that is not in alignment with the centerline of the socket body and includes a step against which the connection element rests during rotation of the socket body, wherein the second face includes a socket driver port therein that does not extend through to the first face of the socket body, the socket driver port having a centerline that is not in alignment with the centerline of the socket body, and wherein the socket driver port is positioned within the perimeter of the socket body.
2. The socket as claimed in Claim 1 wherein the receiving region of the receiving slot is of a polygonal configuration.
3. The socket as claimed in Claim 1 wherein the receiving region of the receiving slot includes a plurality of stepped polygonal configurations.
4. The socket as claimed in Claim 1 wherein the connection element is a nut with wings, said first face of the socket body including a plurality of wing slots for receiving and retaining the wings therein.

5. The socket as claimed in Claim 4 wherein the receiving region is of a rounded configuration.
6. The socket as claimed in Claim 4 wherein the receiving region is of a polygonal configuration.

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EXHIBIT B TO APPELLANT'S APPEAL BRIEF

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Barry Gammon
Serial No.: 10/374,239
Filed: February 25, 2003
For: SOCKET WITH OFF-CENTER SLOT
Examiner: Hadi Shakeri
Art Unit: 3723 Confirmation No. 4527 Paper No. 7

STATEMENT OF ROLAND L'HEUREUX UNDER 37 CFR § 1.132

Mail Stop Non-Fee Amendment
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Dear Sir:

1. My name is Roland L'Heureux. I reside in Kennebunk, Maine.
2. I have been a plumber for approximately 40 years.
3. I have been a member of the National Plumbers Association since the middle 1970's.
4. I have been a member of the Maine State Plumbers Association since the middle 1970's, serving as its president, convention chairman, and legislative chairman.
5. In 1971, I purchased Pillsbury Plumbing and Heating of Kennebunk, Maine, renamed Pillsbury Home Improvement Center approximately two years ago. I am the owner of Pillsbury Home Improvement Center and am involved in the day-to-day operation of the business.
6. Among other products, my company offers for sale many forms of plumbing parts and fixtures, including basin wrenches. In addition, I employ plumbers to install and remove such parts and fixtures for customers.
7. In the course of my responsibilities as proprietor of Pillsbury Home Improvement Center, I have had and continue to have the opportunity to observe, evaluate many plumbing parts and fixtures, including basin wrenches. My plumbing employees have also had the opportunity to do so. My evaluations are used to determine whether to stock such products in my store. My evaluations are based on prior actual experiences with products similar to the Basin Buddy™ socket offered by Barry Gammon, the applicant in the above-captioned application and my

knowledge of prior similar products. My evaluations are also made based on statements made by my plumbing employees who use, or who may have an interest in using, such products.

8. In my years as a plumber and a plumbing parts and fixtures supplier, I have had the opportunity to attend many trade shows and conventions at which plumbing tools were displayed, including basin wrenches.

9. I recently had the opportunity to inspect the Basin Buddy™ socket offered by Barry Gammon, the applicant in the above-captioned application. I have also had the opportunity to review the patent application, including the drawings and the claims. The Basin Buddy™ socket that I inspected is the same device as described in the patent application that I reviewed and, in particular, it appears to be the same device shown in FIGS. 2 and 3 of the patent application. The Basin Buddy™ socket is clearly designed to rotatably loosen or tighten a connection element, such as a basin nut. The Basin Buddy™ socket is a single body having a centerline, a first face, an opposing second face and a receiving slot extending from the first face to the second face. The receiving slot includes a receiving region adjacent to the first face for receiving and capturing the nut. The receiving region has a centerline that is offline from the centerline of the socket body and includes a step against which the nut rests during rotation of the socket body. The second face includes a socket driver port therein that does not extend through to the first face of the socket body, and the socket driver port has a centerline that is offline from the centerline of the socket body.

10. In all my years of experience as a plumber and as a supplier of all sorts of plumbing parts and fixtures, I have never observed a device designed in the manner of the Basin Buddy™ socket. I have observed and used many wrenches intended for use as a means to loosen or tighten a basin nut positioned under a basin. They all have been of limited use for a variety of reasons. One limitation is that the opening where the wrench contacts the nut is centered on the body of the wrench. That design makes it very difficult to rotate the wrench effectively because of the alignment of the tube or pipe to be installed or removed with the connecting nut. Another limitation is that the receiving head fails to capture the nut completely, resulting in slippage of the tool off the nut during rotation, especially for nuts in hard-to-reach places.

11. It has been a longstanding problem in the field of plumbing to be able to loosen basin nuts that have been in place for a long period of time. In particular, they tend to rust in place. All prior basin wrenches that have been used in the plumbing field to remove such basin nuts

have met with limited success. In reality, they involve much more of the plumber's time than is desired, they force the plumber into awkward positions under the basin, and they can cause injury due to considerable exertion to force the loosening. Therefore, there has been a long-felt need for a better basin wrench.

12. Mr. Gammon's Basin Buddy™ socket appears to be the first device that I have ever seen that addresses all of the problems described above. It appears that having the receiving slot offline from the center of the socket body and the driver port offline from that socket body center provides maximum mechanical advantage without alignment on the tube or pipe to be installed or removed. Discussions that I have had with other plumbers who have used the Basin Buddy™ socket lead me to believe that they have not seen or used a device of the same or similar design that solves the longstanding problem of accessing and being able to loosen a basin nut that has been in place for a considerable amount of time.

13. Mr. Gammon also provided me with the opportunity to review the box wrench described in US Patent No. 2,715,347 issued to Johnson. He asked me to consider the Johnson wrench in comparison to the prior wrench limitations mentioned above and in light of Mr. Gammon's Basin Buddy™ socket. It is clear to me, and based on my experience as a plumber and as a plumbing parts and fixtures supplier, that the Johnson box wrench has the same limitations as prior wrenches and is substantially different from the Basin Buddy™ socket. First, the Johnson wrench does not have the socket driver port as part of the socket head. Instead, it is adjacent to it. For that reason, the Johnson wrench cannot produce the sort of mechanical advantage that the Basin Buddy™ socket, which has the driver port on the socket body, does. Second, the driver arrangement of the Johnson wrench appears to require a considerable amount of room for the plumber to cause its rotation. In particular, FIGS. 1 and 2 of the Johnson patent appear to show that the handle extension extends perpendicular from the handle-receiving shank and must therefore require rotation in a very wide arc centered on the socket head. That may provide the necessary mechanical advantage that is lost by placing the driver port off from the socket head. On the other hand, the Basin Buddy™ socket does not require a wide-arc rotation but nevertheless provides adequate mechanical advantage to perform its intended function, particularly in regard to basin nuts.

14. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these

statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 USC 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued.

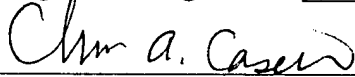
By: 

Roland L'Heureux

Date: 9/8/03

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I hereby certify that this correspondence is being deposited with the US Postal Service in an envelope with sufficient postage as first class mail and addressed to Mail Stop Non-Fee Amendment, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450, on September 11, 2003. It is hereby requested that this correspondence be assigned a filing date of September 11, 2003.



Chris A. Caseiro